

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,120	1	12/04/2003	Jitendra Mohan	P05746 (NATI15-05746)	7655
23990	7590	10/19/2005		EXAM	INER
DOCKET	CLERK		UNELUS, ERNEST		
P.O. DRAW			ART UNIT	PAPER NUMBER	
DALLAS, TX 75380					TATER NOMBER
				2828	•
			DATE MAILED: 10/19/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		DK .
	Application No.	Applicant(s)
	10/728,120	MOHAN, JITENDRA
Office Action Summary	Examiner	Art Unit
	Ernest Unelus	2828
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	vith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the meaned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUN R 1.136(a). In no event, however, may a n. eriod will apply and will expire SIX (6) MO tatute, cause the application to become A	ICATION. I reply be timely filed INTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
Status		
1)⊠ Responsive to communication(s) filed on <u>€</u>	03/05/0 <u>4</u> .	
•	This action is non-final.	
3) Since this application is in condition for all closed in accordance with the practice und		
Disposition of Claims		
4)  Claim(s) 1-20 is/are pending in the applica 4a) Of the above claim(s) is/are with 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-20 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and	ndrawn from consideration.	
Application Papers		
9) The specification is objected to by the Exam 10) The drawing(s) filed on 29 December 2004 Applicant may not request that any objection to Replacement drawing sheet(s) including the co	! is/are: a)⊠ accepted or b)[ o the drawing(s) be held in abeya orrection is required if the drawin	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in priority documents have bee ureau (PCT Rule 17.2(a)).	Application No  n received in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892)		v Summary (PTO-413) o(s)/Mail Date
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date</li> </ul>	"	f Informal Patent Application (PTO-152)

Art Unit: 2828

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasaki et al. (US 6,355,905).

With respect to claims 1, 9, and 15, Sasaki discloses a system comprising: a controller (46) that, when operably coupled to a light source emitting light at a selectively variable output power, determines an output power for emitted light based upon measurements of forward voltage and current across and around the light source, ambient temperature around and across the light source (col. 2, lines 36-49 and col. 5, lines 11-20).

With respect to claims 2 and 10, Sasaki discloses that the forward voltage is employed to determine a forward current through the light source, and wherein the output power is determined based further upon the forward current (col. 5, lines 28-39).

With respect to claims 3 and 11, Sasaki discloses that the forward current is measured, calculated (col. 5, lines 39).

Art Unit: 2828

With respect to claims 4-5, 12-13, and 18, Sasaki disclose a forward voltage that' employed to determine the temperature for the light source and wherein the output power is determined based further upon the temperature of the light source. Sasaki fails to indicate that the light source is on die. However, since the laser diode is on a die, the limitation is inherently met. (For example US pub 20050111797).

With respect to claims 6 and 14 Sasaki discloses the output power being determined without measurement of emitted light (see fig. 3).

With respect to claim 7, Sasaki discloses an optical subassembly comprising the light source and adapted for transmission of data over an optical transmission medium (col. 1, lines 21-23).

With respect to claim 8, Sasaki discloses a computer, a processor (70) coupled to the controller (46), and a network connection through the optical subassembly to the optical transmission medium (col. 5, lines 10-15).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2828

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 16, 17, 19, and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US 6,355,905) in view of Archenhold et al. (US 200/0057888).

With respect to claim 16, Sasaki discloses a laser processing apparatus without specifically disclosing a temperature sensor. A temperature sensor proximate to the light source and coupled to the controller, the temperature sensor providing measurements of the ambient temperature for use by the controller is well taught by Archenhold (paragraph 0050). It would have been obvious to one of ordinary skill in the art to include the temperature sensor, simple, to contained and monitored the temperature of the control system.

With respect to claim 17, Sasaki and Archenhold disclose everything as claimed above. In addition, Sasaki discloses a voltage detector providing measurements of the forward voltage to the controller (see fig. 3).

With respect to claim 19, Sasaki disclose a laser processing apparatus with everything claimed above without specifically indicating a look up table for the forward current. A look up table for the forward current is well taught by Archenhold (paragraph 0067). It would have been obvious to one of ordinary skill in the art to Include a look up table for the forward current to control the power dissipation of the apparatus.

Art Unit: 2828

With respect to claim 20, Sasaki and Archenhold disclose everything as claimed above. In addition, Sasaki discloses that the output power is determined without measurement of emitted light (see fig. 3).

#### Conclusion

The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure.

Kingsley et al. (US Pat. 6,479,979) discloses an opto-electric device for measuring the root mean square value of an alternating current voltage without specifically disclosing the look up table. Yoneda (US 2004/0090189) discloses an electric power supply system for LED lighting unit without the look up table.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is 571-272-0218. The examiner can normally be reached on 9:00am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

Art Unit: 2828

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.U ·

ANDRA V. SMITH PRIMARY EXAMINER